

## Abstract

The invention relates to a device connecting method when implementing dynamic  
5 networking in a home network which is used to manage a peer-to-peer device in a  
network without a resource management device. The device connecting method  
includes the steps of: sending a device connecting request from a connection  
initiating device to a connection target device; generating a connection challenge  
value randomly by the connection target device and sending it to the connection  
10 initiating device; generating a connection reply value according to the connection  
challenge value by the connection initiating device and sending it to the connection  
target device; sending a connection response message from the connection target  
device to the connection initiating device according to the connection reply value;  
and judging a result of connection according to the connection response message,  
15 by the connection initiating device, when the connection response message  
represents successful, establishing a peer-to-peer connection between the  
connection initiating device and the connection target device. A connection  
disconnecting method includes the steps of: if one of devices having a peer-to-peer  
connection relation sends a connection disconnecting message to the other, then  
20 the connection being able to be disconnected. The initiating and target devices can  
be a service providing device and a service utilizing device one another.